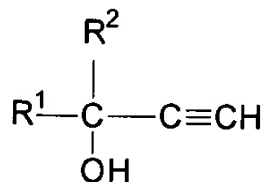


22. (new) A method of attracting mosquitoes within a three-dimensional space comprising releasing within the three-dimensional space a mosquito attracting effective amount of carbon dioxide and at least one 1-alkyn-3-ol of the formula:



wherein R<sup>1</sup> is a saturated aliphatic hydrocarbon group containing from 1 to about 12 carbon atoms, and R<sup>2</sup> is hydrogen and wherein the amount of the at least one 1-alkyn-3-ol released is from about 0.01mg/hr to about 10 mg/hr.

23. (new) A method of claim 22 wherein the at least one 1-alkyn-3-ol comprises 1-octyn-3-ol.
24. (new) A method of claim 23 wherein the releasing of the 1-octyn-3-ol comprises evaporation, atomization or ionic dispersion.

### REMARKS

Favorable reconsideration of this application and the Office Action of August 29, 2003 in view of the amendment to the claims and the following remarks is respectfully requested.

Filed concurrently herewith is a one-month Extension Of Time request and requisite fee to extend the period for response to December 29, 2003.

Claims 3 to 17 and 22 to 24 appear in this application as amended. Withdrawn Claim 1, 2 and 18-21 have been canceled to place this application in condition

to be allowed. Said cancellation of those claims is without prejudice to Applicants' rights to file one or more applications drawn to the subject matter thereof.

Claims 22 to 24 have been added to provide claim coverage on preferred embodiments of the invention. Claim 3 has been amended to make explicit what was implicit in the claim, i.e., that the effective attracting amount is an amount for attracting mosquitoes.

It is noted that claims 15 and 17 have not been rejected and are therefore deemed allowable. Since the claims from which they depend are considered allowable for the reasons set forth herein it is not considered necessary to rewrite claims 15 and 17 in independent format.

Claim 3-14 and 16 have been rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. It is contended that the disclosure does not enable one skilled in the art to make and use the claimed invention. The purported basis for this rejection is clearly erroneous.

It is contended that the specification fails to show the claimed compounds attract mosquitoes. This is patently untrue. The data on page 7 of this application shows that replacement of a known 1-alkene-3-ol ( 1-octen-3-ol) mosquito attractant with a 1-alkyn-3-ol attractant (1-octyn-3-ol) of this invention attracts 71% more mosquitoes in the same attraction system. Thus, this data clearly shows the compounds of this invention are attractants for mosquitoes and, in fact, are unexpectedly better attractants than the known 1-alkene-3-ol attractants.

It is further contended that **undue** testing and experimentation is required to determine the compounds and amounts that are effective against various species of mosquitoes. This contention is clearly untrue. Those skilled in the art upon reading Applicants' disclosure know various methods, including the one in the application, to determine optimal compounds and amounts for various species of mosquitoes. The

experimentation and testing does not involve any inventive activity and applicants specification clearly defines the compounds and general ranges of amounts. Thus any testing is not “undue” and th rejection is therefore erroneous.

Thus, there clearly is no valid basis for rejecting the claims under 35 U.S.C. 112, first paragraph, as lacking an enabling disclosure. The USPTO is therefore respectfully requested to reconsider and withdraw this Section 112, first paragraph, rejection of claims 3-14 and 16.

Claims 3 –14 and 16 stand rejected under 35 U.S.C. 103 as being obvious to one skilled in the art over the disclosure in Nolen (US 5,205,064) and Wigton et al. (5,813,166) in view of Vander Meer et al. (US 5,721,274), Bernier et al (US 6,267,953) and an abstract of an article by Siani et al. (Physiol. Entomol. 14 (1) , 85-90 (1989)). This rejection is respectfully traversed. The combination of disclosure in no way renders obvious the claimed invention.

The PTO is respectfully requested to provide Applicants with a complete copy of the Siani et al. article employed in the rejection.

Applicant's claimed invention relates to a method off attracting **mosquitoes** in a three-dimensional space by releasing into that space an attracting effective amount of at least one 1-alkyn-3-ol of a formula specified in claim 3. Such 1-alkyn-3-ols attractants include 1-octyn-3-ol.

While the disclosure in both Nolen relates to a device and method for attracting mosquitoes to an electric grid so they can be killed, the device and method of Nolen discloses only using carbon dioxide and octenol (i.e., 1-octen-3-ol) as the chemical for attracting mosquitoes. There is no disclosure, teaching or motivation to one skilled in the art to employ a 1-alkyn-3ol to attract mosquitoes.

The Wigton et al. patent relates to a system for **preventing** mosquitoes from entering an area. The Wigton et al. system employs the slow release of octenol (i.e., 1-octen-3ol). Like the aforementioned Nolen patent the Wigton et al. patent contains no disclosure, teaching or motivation to one skilled in the art to employ a 1-alkyn-3ol to attract mosquitoes.

The deficiencies in the Nolen and Wigton et al. disclosures are not cured by the disclosure in the Vander Meer et al. patent. The Vander Meer et al. patent is directed to methods and compositions for **repelling fire ants which are crawling insects**. The Vander Meer et al. patent discloses a wide range of compounds for this purpose including 1-octyn-3-ol at column 10, line 33. However, this patent disclosure would teach or provide the basis for motivation to one skilled in the art that 1-octyn-3ol would be effective in **attracting mosquitoes**. The Vander Meer et al. patent is totally silent as to the use of any of their repellent compounds for anything other than fire ants. The disclosure in Vander Meer et al. does not even suggest their use with other crawling insects, let alone **flying insects such as mosquitoes**. Nothing in Vander Meer et al. teaches or renders obvious that 1-alkyn-3-ols are able to attract mosquitoes.

The deficiencies in the Nolen and Wigton et al. disclosures are also not cured by the disclosure in the Bernier et al. patent. **This patent discloses no 1-alkyn-3-ol compound** and contains no disclosure to lead one skilled in the art to employ 1-alkyn-3ols as attractants for mosquitoes.

Similarly, the deficiencies in the Nolen and Wigton et al. disclosures are also not cured by the disclosure in the abstract of the Siani et al. article. While the disclosure in the Siani et al. abstract does mention 1-octyn-3-ol it is to be noted that this is in connection with attraction of tsetse flies and not mosquitoes. Tsetse flies are in the genus *Glossina* and are in the same family as the housefly and are not analogous to mosquitoes. Moreover, both male and female tsetse flies need a blood meal every day and as a result are primarily livestock biters. In contrast, mosquitoes are from a completely different genus. Additionally, only the female mosquitoes need a blood meal about every ten day to produce eggs and are primarily people biters. Thus, those skilled in the relevant art know that there is no direct

correlation between tsetse fly attractants and mosquito attractants. Therefore, it would not be obvious to one skilled in the art, from the disclosure in the Siani et al. article abstract, that an 1-alkyn-3ol would be a better attractant than 1-alken-3ols **for mosquitoes**. The only suggestion of that comes from the disclosure in the present application, and use of the disclosure in this application by the present applicants is erroneous and impermissible hindsight reconstruction.

The lack of any motivation to combine the reference disclosures defeats any basis for establishing a *prima facie* case for obviousness and would require withdrawal of any 35 U.S.C. 103 obviousness rejection. *In re Dembiczak*, 50 USPQ 2d, 1614 (Fed. Cir. 1999). As stated by the court in the Dembiczak case, "Broad conclusionary statements regarding the teaching of multiple references standing alone are not evidence" (of unobviousness) *Ibid* at page 1617. Nothing in the cited references specifically leads one skilled in the art to Applicants' claimed invention. Rather, the impermissible hindsight of Applicants' disclosure has been utilized to piece together the disclosure to read into them specifics that are not there in an attempt to arrive at the claimed invention. Thus, there is no *prima facie* case for obviousness established by the reference disclosures, and the rejection of claims 3 to 14 and 16 over these reference disclosures should be withdrawn.

Furthermore, the Action erroneously bases this rejection on the contention that "One of ordinary skill in the art would find it obvious to test the superior (for tsetse flies) 1-octyn-3-ol attractant to optimize control over the insect of concern." This "obvious to try" standard is clearly is not the standard for patentability required by the US patent statutes. Numerous cases have held that this "obvious to try" standard is not capable of rendering an invention obvious under 35 U.S.C. 103; see for example *In re O'Farrell*, 853 F. 2d 894, 7 USPQ 2d 1673 (Fed. Cir. 1988).

Therefore, the PTO is respectfully requested to reconsider and withdraw this Section 103 rejection of claims 3-14 and 16 over Nolen and Wigton et al. in view of Vander Meer et al., Bernier et al. or the Siani et al. abstract.

It is respectfully submitted that claims 22 to 24 are also patentable over the cited art for at least these same reasons.

It is respectfully submitted that this response is a full and complete response to the Office Action of August 29, 2003 and it is further respectfully submitted that all the elected claims are allowable over the prior art for at least the reasons indicated. An early indication of their allowability is earnestly solicited.

Respectfully submitted,

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